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USER'S MANUAL

Ferm Omnisaw

FOS-500E

Ferm®

Art.nr. 726705
Screwfix nr. 12875

UK English

FERM FOS-500E OMNISAW USERS MANUAL

TECHNICAL SPECIFICATIONS

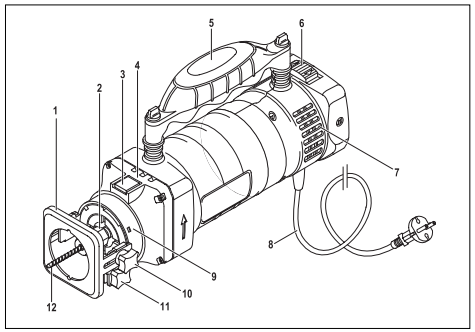
Voltage	230 V~
Frequency	50 Hz
Power input	500 W
Speed, no load	30000/min
Nett weight	1.51 kg
L_{pa} (sound pressure)	83.9 dB(A)
L_{wa} (sound power level)	96.9 dB(A)
Vibration value	4.6 m/s^2

PACKAGE CONTENTS

This package contains:
1 Router
1 Parallel guide – unassembled
1 Guide bush
2 Screws
2 Nuts
1 8mm Collet
1 6mm Collet
1 Collet
1 Cutter
1 Dust extractor adaptor
1 Spanner
1 Instruction Manual
1 Guarantee card

Check the machine, loose parts and accessories for transport damage.

PRODUCT INFORMATION



1. Base plate and depth guide
2. Collet nut
3. Spindle lock button
4. Exhaust air vents
5. Removable auxiliary handle
6. On/off slide switch
7. Intake air vents
8. Power supply cable
9. Depth guide bracket
10. Depth guide locking knob
11. Locking knob of depth guide bracket
12. Bit
13. Protection guide cap (Not shown).

SAFETY INSTRUCTIONS

The following symbols are used in these instructions for use:

Denotes risk of personal injury, loss of life or damage to the tool in case of non-observance of the instructions in this manual.

Denotes risk of electric shock.

Carefully read this manual before using the machine. Make sure that you know how the machine functions and how to operate it. Maintain the machine in accordance with the instructions to make sure it functions properly. Keep this manual and the enclosed documentation with the machine.

Ferm products are manufactured to high quality standards, they are safe and fit for purpose at time of sale, but all tools can be dangerous if the correct precautions are not taken. Always follow these instructions, do not carry out the operation until you are sure you can do so in safety. Remember to consider the work environment for safe operation as well as safety for tool use.

Warning! *When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before attempting to operate this product. Save these instructions for future reference.*

PERSONAL SAFETY

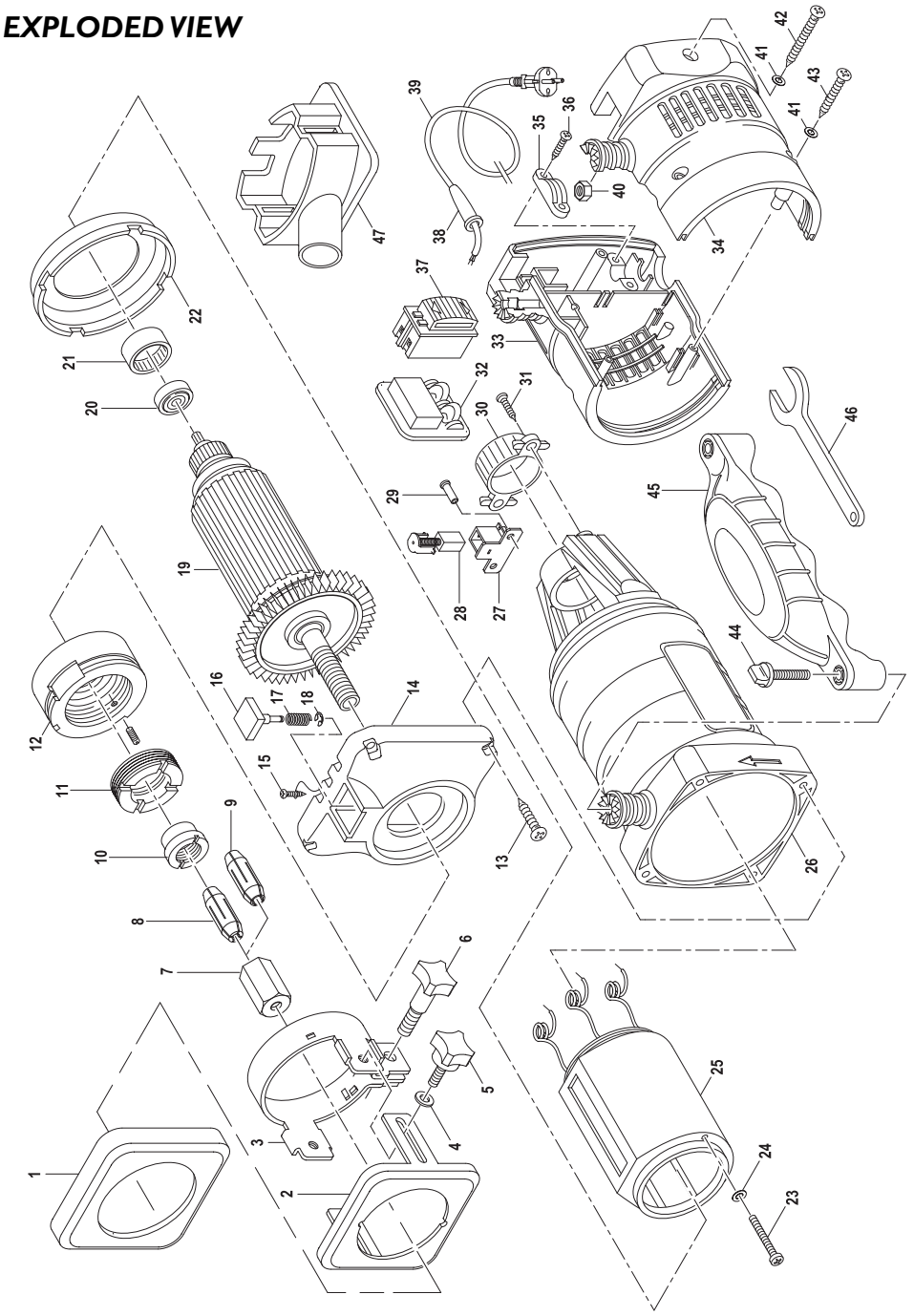
Use Personal Protection Safety Equipment

Protect eyes with safety glasses or goggles note: the use of safety protective eyewear without the CE mark can lead to serious injury if the lens breaks. A suitable dust mask should be worn if cutting, drilling or sanding is dusty, in particular chipboard or MDF.
Approved safety footwear and headgear should worn as appropriate, for example on building works or when heavy weights are involved. Wear suitable gloves and apron to protect against sparks/debris. Wear earplugs or ear defenders.

Dress properly

Do not wear loose clothing or jewellery. It can get caught in moving parts. Non-skid footwear is recommended when working out doors. Wear protective hair covering to contain long hair

EXPLODED VIEW



SPARE PARTS LIST FOS-500E

POS.	DESCRIPTION	FERM ET-NR.
001	PLASTIC PLATE	408700
002	BASE PLATE	408701
005	KNOB	408702
006	LEVER FOR FIXING RING	408703
007	NUT	408704
008	COLLET 1/4"	408705
009	COLLET 1/8"	408706
012	BEARING	408707
016	LOCKING PIN	408708
019	ROTOR	408709
020	BEARING (608 Z)	800608
021	RUBBER BEARING HOLDER	408710
025	STATOR	408711
028	CARBON BRUSH SET	408712
037	SWITCH	408713
044	KNOB FOR HANDLE	408714
045	HANDLE	408715
046	WRENCH	408716

Stay alert
Watch what you are doing Use common sense. Do not operate tools when tired or after taking alcohol or prescription/ non-prescription drugs.

OPERATIONAL SAFETY

Warning! *Always make sure the machine is switched off and unplugged when its not being used, you are changing cutters or moving the work piece. See safe work order summary section for details*
Be aware: this is a powerful machine and requires two hands to operate it.

Concentrate
Routine and repetition can lead to mistakes. Remember that a slight lack of concentration can result in serious injuries in a split second.

Keep work area clean
Cluttered areas and benches invite injuries.

Consider the work environment
Do not expose power tools to rain or use them in damp or wet locations. Keep work area well lit. Do not use power tools in the presence of flammable liquids, vapours or gases.

Guard against electric shock
This unit contains dangerous voltages. Use a RCD (residual current device) to provide protection against electrical shock. Prevent body contact with grounded surfaces (e.g. pipes, radiator, ranges or refrigerators).

Keep children and pets away
Do not let children or pets come into contact with the tool, extension cable or work area.

Do not force the tool
It will work better and safer at the rate for which it was intended.

Use the right tool
Do not force small tools or attachments to do the job of a heavy-duty tool. Do not use tools for purposes for which they were not intended; for example do not use a circular saw for cutting trees or logs.

Do not abuse the cable
Never carry the tool by the cable or pull it to disconnect it from the power socket. Keep the cable away from heat, oil and sharp edges. Do not touch the metal plug pins when connecting or removing the plug.

Secure work
Use clamps or a vice to hold work. It is safer than using your hand and it frees both hands to operate the tool. **Be aware that this saw is a powerful machine; you must use two hands to control it.**

Do not over-reach
Keep a proper footing and balance at all times

Disconnect tools from power supply
When not in use, before servicing and when changing accessories such as blades, bits and cutters. **Always switch off and unplug the saw from the power supply before making adjustments or changing cutters .**

Remove adjusting keys and wrenches
Ensure that they are removed from the tool before switching on.
Avoid unintentional starting
Do not carry plugged in tools with your finger on the switch. Check that the switch is off before plugging in to socket.

Extension cables
Use only three core earthed extension cables suitable for the power input of the tool (minimum cable size 1.5mm2). Plug into an earthed socket only.
When using a cable reel unwind it fully. Do not use long extension cables.

Outdoors use
If the tool is suitable to be used outdoors, only use an extension cable intended for outdoor use and marked accordingly. Use a RCD (residual current device) to provide protection against electrical shock. Do not use in rain or damp conditions.

Connect a dust extraction device
Whenever there are facilities for fitting a dust or fume extraction system, make sure it is connected and used.

Use recommended accessories
The use of any other accessory or attachment other than recommended in the instructions or catalogue may present a risk of personal injury. Use extension cables suitable for the power input of the machine (minimum cable size 1.5mm2). When using a cable reel unwind the cable fully.

OMNISAW CUTTERS

Your saw is delivered with 5 cutter bits - refer to the illustration below to identify the different items. Note: the larger (6.35mm) cutters fit the larger collet and the smaller (3.17mm) fit the smaller collet. See sections - changing/fitting collets and cutters.

THE LAMINATE SURFACE PROTECTOR CAP

A plastic cap for the depth guide foot is supplied with the saw to prevent damage to laminated surfaces when cutting them. To fit, line up lugs on the protector with slots on inside edge of depth guide foot and push firmly home. See illustration below.

When using the protector ensure that it and base plate are totally free from dust and that the protector fits tightly on the guide foot – it must be replaced when it becomes worn or loose fitting – phone helpline for spares.

Only use the protector for plastic laminate work. Remove it for all other jobs.

BEFORE USING THE OMNISAW

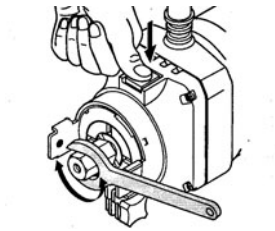
- **Only use cutters designed for use with the omnisaw.**
- Make sure that the shank size of the cutter you are using is the same size and compatible with the collet on in the machine.
- Make sure the cutter speed is the same or less than that of the machine – see technical specifications.
- Before replacing a cutter make sure the machine has come to a complete stop and is switched off and unplugged. Wait for the cutter to cool.

Ensure the saw switch is OFF and it is unplugged from the mains before changing cutters, adjusting or inspecting this machine. Be aware the cutting edges of the bits are very sharp. Handle with care, use appropriate safety equipment.

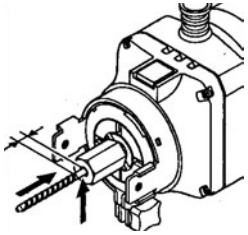
TO FIT/REPLACE A CUTTER

Refer to illustration below.

- Press the spindle lock button and turn the collet nut until it engages the lock, keep the spindle lock button pressed.
- Loosen the collet nut anticlockwise using the spanner provided.



- Remove to the old cutter if fitted.
- Check you have the correct diameter collet for the new cutter.
- Push the new cutter into the collet making sure that the shank (smooth part) has 1 to 3 mm protruding above the nut (see illustration below) – do not push the cutter in further than this.
- **If the cutting edges of the cutter are pushed into the collet, they will be damaged when the collet nut is tightened.**

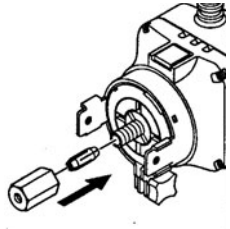


- Tighten the collet nut firmly clockwise with the spanner and release the spindle lock button.

CHANGING/REPLACING A COLLET

Refer to illustration below.

- Press the spindle lock button and turn the collet nut until it engages the lock, keep the spindle lock button pressed.
- Loosen the collet nut anticlockwise using the spanner provided.
- Remove the cutter and collet nut.
- Remove the old collet
- Insert the new collet; it can go into the spindle either way round.
- Replace the collect nut and insert a cutter as instructed in section 'To fit and replace a cutter'



INSTALLING AND REMOVING THE DEPTH GUIDE ASSEMBLY

Refer to illustration below.

- The depth guide assembly controls the depth of cut – maximum 25mm.
- Do not use the saw without the guide assembly in place.
- To remove the depth guide – loosen the thumbscrew on the guide collar and rotate the assembly clockwise 45°
- Pull the assembly off the saw.

Check for damaged parts
Do not use a tool with damaged parts, before further use a damaged tool must be carefully checked by a qualified person to determine that it will operate properly. Check for alignment of moving parts, binding or breakage of parts, mounting and other conditions that may affect its operation. A damaged part or guard should be properly repaired by an authorised service centre, unless indicated otherwise in the instruction manual. Have defective switches replaced by an authorised service centre. Do not use a tool if the switch does not turn on and off.

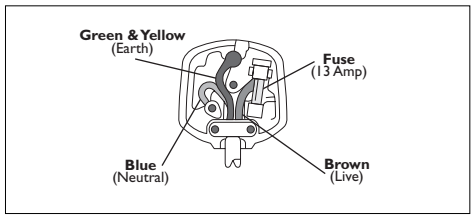
Have your tool repaired by an expert
This appliance is manufactured in accordance with relevant safety standards. Only experts must carry out repairing of electrical appliances, otherwise considerable danger for the user may result.

Storing tools
When not in use tools should be stored in the dry, out of reach of children.

Lubrication
The machine requires no user lubrication

ELECTRICAL INFORMATION
This product is complete with a pre-wired mains plug, it is double insulated in accordance with EN 50144 – no earth wire is required.
If the plug needs replacing follow these instructions.

Wire correctly
The wires in the mains lead are coloured in the following way:
BLUE -Neutral
BROWN -Live



Securing wires
Secure wires carefully and firmly to the correct terminals. Secure the mains cable in the plug cord grip firmly
Fit a 5-amp fuse. If a 13amp (BS1363) plug is used a (BS 1362) ASTA approved 5-amp fuse must be fitted.

Recycle/Dispose of old plug and cable
Prevent inadvertent connection to socket and risk of electric shock.

ENVIRONMENT
Recycle the packaging according to the identification marks on it.
At the end of the product or its accessories life please recycle where facilities exist - phone the Helpline for current advice on recycling.

Helpline
For any questions relating to operational or safety matters contact:
Ferm Customer Helpline on: **0115 966 1199**
Monday-Friday **8am – 6pm**
Saturday **9am – 1 pm**

GUARANTEE
The guarantee conditions can be found on the separately enclosed guarantee card.

CE DECLARATION OF CONFORMITY (UK)

We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents

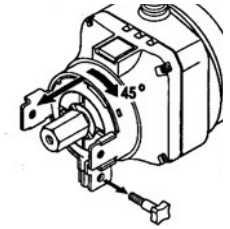
EN50144-1, EN50144-2-17, EN55014-1, EN-55014-2, EN61000-3-2, EN61000-3-3,

in accordance with the regulations.

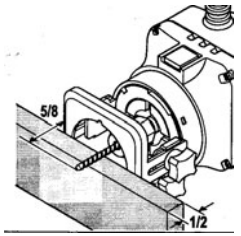
98/37/EEC, 73/23/EEC, 89/336/EEC

from 03-07-2001
GENEMUIDEN NL
W. Kamphof
Quality department

- To install the depth guide – line up the notch on the guide collar with the notch on the saw's collar (in front of spindle lock button)
- Push guide assembly onto saw collar.
- Rotate 45° anticlockwise and tighten thumbscrew on guide collar firmly.



ADJUSTING THE DEPTH GUIDE
Refer to illustration below.
- Loosen the thumbscrew on either side of the guide assembly anticlockwise.
- Position the guide foot at the desired depth (thickness of material plus 3mm so you have a clean cut on the underside)
- Tighten the thumbscrews firmly clockwise.



USING THE OMNISAW

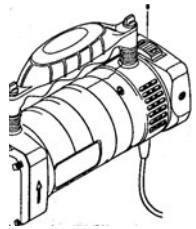
Ensure the saw switch is OFF and it is unplugged from the mains before changing cutters, adjusting or inspecting this machine. This saw is intended for use on wood, plaster/drywall board and plastics only. The saw is designed to be hand held only. Do not clamp to bench or fix in a vice.

BEFORE OPERATING
- Check the voltage on the saw corresponds with your power supply voltage and that the plug and lead are in good condition.
- Check you have the correct type of cutter for the machine, that it suitable for the spindle speed of the saw and that it is mounted correctly. Do not use parts other than supplied with the machine to make the cutter fit properly.
- Check you have a cutter suitable for the material being cut and that it is in good condition.
- Check that the thumbscrews and collet nut are secure
- Run idle for 30 seconds - if there is any abnormal vibration or other fault – switch off, inspect and rectify before continuing.

OPERATION
Refer to the illustration below
- Put the machine in a safe rest position so that the cutter is not touching anything, i.e. the workpiece, power lead or bench.
- Check the machine is switched **OFF**.
- Plug into a suitable mains supply and switch on at the plug.
- Be aware that this machine has a powerful motor and needs two hands to operate it safely.

Holding the saw
To switch the saw **ON**
- Push the slide switch towards (**I**).

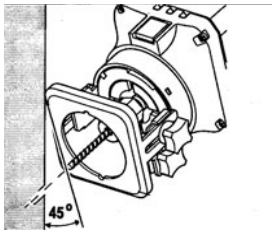
To switch the saw **OFF**
- Push the slide switch towards (**O**).



DURING USE
- Place the base gently but firmly onto the work piece.
- Let the cutter come to full speed before cutting the work piece – this is a powerful machine and will kick if the cutter is pressed too hard or jammed.
- Always use two hands to control the machine.
- Keep the base in firm contact with the work piece.
- Do not force the saw. Move gently and steadily along the line of cut.
- Check material for foreign bodies. For example check for nails, screws, clamps etc.
- Check for services. Make sure that there no electrical wires, water or gas pipes in the material being cut. It you do not know their position – disconnect them before cutting. Remove all electrical fuses and circuit breakers- do not proceed if you are unsure.
- Clamp material properly. Do not use hand or foot to support the work piece. Saw away from yourself.
- Use constant gentle pressure.
- If the cutter seizes, switch off, unplug and open the cut with a suitable tool before pulling the cutter out – never switch the saw on with the blade jammed.
- Do not put the machine down with the motor still running.
- Do not put the machine down on a dusty surface – dust will get into the air vents and damage the motor.
- Regularly inspect the cutter (switch off and unplug first) during use for signs of damage or wear and replace when required.
- Do not press the spindle lock button - while the saw is running.
- Switch the machine off before removing the plug from the mains socket.
- Be careful. Do not point the saw at yourself or other people. Keep your hands away from the cutter.

MAKING A CUT

- Switch the saw on and let the cutter come to full speed.
- Put the guide foot onto the workpiece and insert the cutter at a 45 degrees angle. See illustration below.



- Bring the saw to a 90 degrees angle so that the guide foot is flush with the workpiece.
- When cutting a vertical surface, finish the cutout at the top so the scrap piece will not drop onto the cutter.
- Switch off after completing the cut and remove the saw the cutter has stopped rotating.
- Unplug and put the saw in a safe rest position.

SAFE WORK ORDER - A SUMMARY

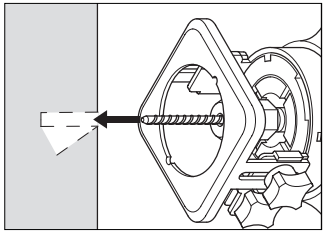
- Check the machine is switched **OFF** and unplugged.
- Set cut depth
- Check thumbscrews and collet nut are secure
- Clamp the workpiece if applicable. Check for obstacles/services – if you are not sure of their position disconnect them.
- Check the power lead is well away from the workpiece.
- Check the cutter is secure and free to revolve.
- Switch **ON** in safe rest position and run idle to check the machine is functioning correctly.
- Perform the work.
- Switch **OFF** and let the cutter stop.
- Put the machine in a safe rest position and unplug from mains.

CUTTING AROUND OUTLET BOXES IN DRYWALL

Do not use this tool to make cutouts around any fixture or opening that has live electrical wires, or any wall that may have live electrical wiring behind it. The bit could conduct current to the tool, creating an electrocution hazard for the operator. If cutting into existing walls or other blind areas is unavoidable, disconnect all fuses or circuit breakers to the worksite. Always hold the tool by its thermoplastic housing.

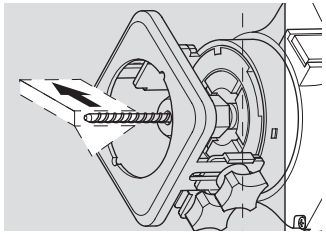
To cut around an outlet box in drywall:
Refer to the illustration below

- Push the electrical wires back or to the far side of the box so that the bit does not cut the wires when inserted through the drywall.
- Make a mark somewhat near the centre of the opening in the box on the side of the drywall facing you before fastening the drywall.
- Fasten the drywall with nails or screws. Do not nail or fasten screws closer then 12" from the box, or the drywall may bulge or blister from the excess pressure.
- Switch the tool "ON".
- Push the bit through the mark you made while holding the tool firmly with both hands.



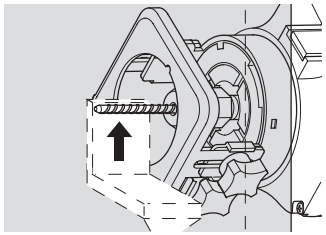
Refer to the illustration below

6. Guide the bit to the right until you feel and hear the bit touch the inside edge of the box.



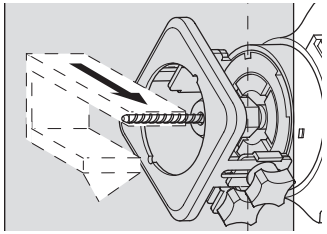
Refer to the illustration below

7. Pull out the bit far enough to slip it over the edge of the box so it is now against the outside of the box.
8. Move the bit in counterclockwise direction until you feel and hear it come to the upper left corner. To do this, apply light upward pressure and keep the bit in contact with the outside of the box.



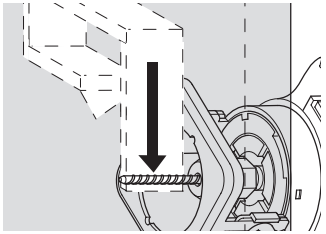
Refer to the illustration below

9. Round the upper right corner applying light downward and inward pressure.
10. Move the bit along the top contour until you feel and hear it come to the upper left corner. To do this, apply light pressure to the right and keep the bit in contact with the outside of the box.



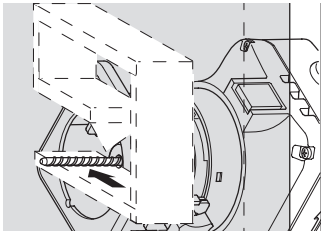
Refer to the illustration below

11. Round the upper left corner applying light downward and inward pressure.
12. Move the bit along the left side contour until you feel and hear it come to the lower left corner. To do this, apply light downward pressure and keep the bit in contact with the outside of the box.



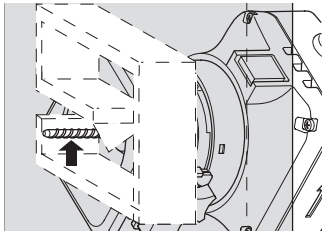
Refer to the illustration below

13. Round the lower left corner applying light upward and inward pressure.
14. Move the bit along the bottom contour until you feel and hear it come to the lower right corner. To do this, apply light pressure to the right and keep the bit in contact with the outside of the box.



Refer to the illustration below

15. Round the lower right corner applying light upward and inward pressure.
16. Move the bit along the right side contour until you meet the initial upward cut. To do this, apply light upward pressure and keep the bit in contact with the outside of the box.
17. Switch the tool "OFF".
18. Take the bit out of the box.



MAINTENCE, CARE AND REPAIR

Switch off and unplug the machine before carrying out any cleaning, adjusting or changing blades.

CLEANING

Do not use water or flammable liquids to clean the saw

FAULTS

Switch OFF immediately at the mains plug and remove the plug when:

- The plug or cable is damaged.
- The switch on the machine is defective.
- You smell or see smoke caused by scorched insulation in the machine.
- The motor runs hot (over 70 degrees)
- The motor has been overloaded - cut more slowly.
- The motor is defective; take to your local dealer for repair.

The saw does not work when switched on

- Damaged plug/fuse, replace as required.
- Defective switch, take to local dealer for repair.

The saw does not cut cleanly or wanders off line

- The cutter is blunt or bent, replace with suitable resharpened or new one.

The saw makes a lot of noise and does not run smoothly

- The carbon brushes need replacing
- Take to your local dealer for inspection or repair.

There are no user serviceable/repairable parts inside this unit. Qualified service engineers must carry out repair and servicing.

MAINTAIN TOOLS WITH CARE

Keep the tool clean for better and safer performance.
Store the cutters properly in accordance with the maker's instructions.
Follow instructions for changing accessories. Inspect tool and extension cables periodically and if damaged, have them repaired by a qualified person or authorised service body. Keep handles free from oil or grease. Keep the ventilation slots clean to prevent the motor overheating.